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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,510	07/25/2000	Fumiaki Kamijo	040405/0323	7595

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EXAMINER	
GRIER, LAURA A	

ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/625,510	KAMIJO, FUMIAKI	
	Examiner	Art Unit	
	Laura A Grier	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1 3, 5, 7, 9, 11, 13, 15, 17, 19 and 21** are rejected under 35 U.S.C. 102(b) as being anticipated by Fado et al, U. S. Patent No. 6016136.

Regarding **claims 1, 9 and 17**, Fado et al. (herein, Fado) discloses configuring audio interface for multiple combinations of microphones and speakers. Fado's disclosure comprises a hard drive and/or RAM on a computer system with a Wizard tool (software) with volume criteria for adjusting volume for a plurality of sound cards or one of the plurality of sound cards (audio software applications) as selected via Windows95 platform - operating system, (abstract, col. 6, lines 18-23, 42-45, col. 11, lines 1-4, col. 9, lines 20-28, col. 13, lines 19-31 and col. 15, lines 36-60), which indicates a memory on a person computer for storing plural sound volume setting information for a variety of software applications, volume adjustment control via an operating system based upon the sound volume setting information.

Regarding **claims 3, 11 and 19**, Fado discloses everything claimed as applied above (see claim 1, 9 and 17, respectively). Fado further indicates that when the user is unable to adjust the volume of the audio application as the time of audio start up, the Wizard tool automatically adjust the volume accordingly applicable to the capabilities of the computer system (col. 13, lines 17-31).

Regarding **claims 5, 13, and 21**, Fado discloses everything claimed as applied above (see claim 1, 9 and 17, respectively). Fado further discloses a GUI for display various function regarding the adjustment of the audio levels to be store, therein based upon the selected sound card application (col. 9, lines 2-6, col. 14, lines 8-47).

Regarding **claims 7 and 15**, Fado discloses everything claimed as applied above (see claims 1 and 9, respectively). Fado further indicates that when the user is unable to adjust the volume of the audio application as the time of audio start up, the Wizard tool automatically adjust the volume accordingly applicable to the capabilities of the computer system (col. 13, lines 17-31); and Fado further discloses a GUI for display various function regarding the adjustment of the audio levels to be store, therein based upon the selected sound card application (col. 9, lines 2-6, col. 14, lines 8-47).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over the Fado in view of Hetherington.

Regarding **claims 2, 10 and 18**, Fado discloses everything claimed as applied above (see claims 1, 9 and 17, respectively). However, Fado fails to specifically disclose a sound volume adjustment coefficient.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10, and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Fado by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

Regarding **claim 4**, Fado discloses everything claimed as applied above (see claim 1). Fado further indicates that when the user is unable to adjust the volume of the audio application as the time of audio start up, the Wizard tool automatically adjust the volume accordingly applicable to the capabilities of the computer system (col. 13, lines 17-31).

However, Fado fails to specifically disclose a sound volume adjustment coefficient.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10, and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Fado by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

Regarding **claim 12**, Fado discloses everything claimed as applied above (see claim 9). Fado further indicates that when the user is unable to adjust the volume of the audio application as the time of audio start up, the Wizard tool automatically adjust the volume accordingly applicable to the capabilities of the computer system (col. 13, lines 17-31). However, Fado fails to specifically disclose a sound volume adjustment coefficient.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10, and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Fado by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

Regarding **claim 20**, Fado discloses everything claimed as applied above (see claim 17). Fado further indicates that when the user is unable to adjust the volume of the audio application as the time of audio start up, the Wizard tool automatically adjust the volume accordingly applicable to the capabilities of the computer system (col. 13, lines 17-31). However, Fado fails to specifically disclose a sound volume adjustment coefficient.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10, and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Fado by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

Regarding **claim 8**, Fado discloses everything claimed as applied above (see claim 1). Fado further indicates that when the user is unable to adjust the volume of the audio application as the time of audio start up, the Wizard tool automatically adjust the volume accordingly

applicable to the capabilities of the computer system (col. 13, lines 17-31); Fado further discloses a GUI for display various function regarding the adjustment of the audio levels to be store, therein based upon the selected sound card application (col. 9, lines 2-6, col. 14, lines 8-47). However, Fado fails to specifically disclose a sound volume adjustment coefficient.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10, and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Fado by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

Regarding **claim 16**, Fado discloses everything claimed as applied above (see claim 9). Fado further indicates that when the user is unable to adjust the volume of the audio application as the time of audio start up, the Wizard tool automatically adjust the volume accordingly applicable to the capabilities of the computer system (col. 13, lines 17-31). Fado further discloses a GUI for display various function regarding the adjustment of the audio levels to be store, therein based upon the selected sound card application (col. 9, lines 2-6, col. 14, lines 8-47). However, Fado fails to specifically disclose a sound volume adjustment coefficient.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10, and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Fado by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

Regarding **claim 23**, Fado discloses everything claimed as applied above (see claim 17). Fado further indicates that when the user is unable to adjust the volume of the audio application as the time of audio start up, the Wizard tool automatically adjust the volume accordingly applicable to the capabilities of the computer system (col. 13, lines 17-31). Fado further discloses a GUI for display various function regarding the adjustment of the audio levels to be store, therein based upon the selected sound card application (col. 9, lines 2-6, col. 14, lines 8-47). However, Fado fails to specifically disclose a sound volume adjustment coefficient.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the

audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10, and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Fado by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

Regarding **claims 6, 14, and 22**, Fado discloses everything claimed as applied above (see claims1, 9 and 17, respectively). Fado further discloses a GUI for display various function regarding the adjustment of the audio levels to be store, therein based upon the selected sound card application (col. 9, lines 2-6, col. 14, lines 8-47). However, Fado fails to specifically disclose a sound volume adjustment coefficient.

Regarding the sound volume adjustment coefficient, in a similar field of endeavor, Hetherington disclose an apparatus and method for smooth audio scaling in a computer system. Hetherington's disclosure includes a DSP including a memory wherein algorithm is provide for determining logarithmic values that are used as multipliers to adjust the change in volume of the audio data samples (col. 1, lines 50-68 and col. 2, lines 1-10, and col. 4, lines 42-64), which constitutes a coefficient.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Fado by providing a logarithmic values (coefficients) as taught by Hetherington for the purpose of scaling and increasing, decreasing or adjusting the volume as desired.

Response to Arguments

5. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

The applicant's directed to the prior art of Olden, in which Olden fails to specifically disclose the use of his system being explicitly identified regards to a personal computer with an operating system for using software applications. A new reference of prior art has been provided as prior art rejection, wherein, the new reference teaches a plurality of audio software applications with a plurality of sound cards to be used within an computer system, wherein a software Wizard tool with volume control information may be used to control the volume of the individual sound cards as selected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG
March 20, 2004

HINSUN CHARNEY
PRIMARY EXAMINER